

**REMARKS**

Claims 1 – 3, 5 – 11, and 13 – 24 are pending in the present Application. Claims 2 – 15 have been cancelled and Claims 1, 16, and 17 have been withdrawn as drawn to a non-elected invention, and Claims 25 – 30 have been added, leaving Claims 18 – 30 for consideration upon entry of the present Amendment.

Claims 25 – 30 have been added to further claim the present invention. Support for this new claim can at least be found in Claim 1 as originally filed as well as in Figures 2 and 15 – 35, and in Paragraphs [0019], [0033], [0038], [0048], [0049], [0053], [0058], [0062], [0063], and [0081] as originally filed.

No new matter has been introduced by this new claim. Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

**Claim Rejections Under 35 U.S.C. § 112, First Paragraph**

Claim 22 stands rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the Specification in such a way as to reasonably convey to one skilled in relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection.

35 U.S.C. §112, first paragraph, states:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

To meet this requirement, it is not required that the specific words be located in the application, but that the subject matter be described in the Specification in such a way as to reasonably convey to one skilled in relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Here, it is alleged that “deposing a thermoset coating on a side of the plastic surface opposite the core” was not described in the specification as originally filed. (Office Action dated April 24, 2006 (hereinafter OA 04/06), page 2). Previously provided were examples of where support for this limitation could be found in the specification. In response, the Examiner

contends that “there is no such a description where the side of the plastic surface opposite the core is located”. (OA 04/06, page 5) However, the specific language “*a side* of the plastic surface opposite the core”, is merely provided to clearly and definitely claim the invention, i.e., to not merely include the thermoset coating, but to explain where it is located in the medium. In the claim, the substrate has a plastic surface and a preformed core. As is discussed in Paragraphs [0038] and [0048], and as is illustrated in Figure 15, for example, a substrate can have a core and a plastic surface (wherein the plastic surface comprises surface features). The core is on “one side” of the plastic surface, and a coating can be on the “other side” of the plastic surface (e.g., the side of the plastic surface opposite the core). This is clearly illustrated in the Figures and supported in the Specification.

If the concern is that the claim does not specify which portion of the side of the plastic opposite the core comprises the coating, that limitation has not been included in the claim. Hence, it could be any portion of the plastic (so long as it is on a side of the plastic surface opposite the core). In other words, the coating is not between the plastic surface and the core.

This claim is clearly supported by the Specification as originally filed. There is no requirement that a limitation be specified in the identical words used in the claim, merely that it be supported by the application as originally filed. Since there is clear support for the language of Claim 22, the requirements of 35 U.S.C. §112, first paragraph, have been met. Reconsideration and withdrawal of this rejection are respectfully requested.

#### Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claim 22 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In particular, the phrase, “deposing a thermoset coating on a side of the plastic surface opposite the core,” as recited in lines 1 – 2, allegedly renders the claim vague and indefinite. It is unclear as to where the side surface of the plastic surface opposite the core is indicated. (OA 04/06, pages 2 – 3)

If the concern is that the claim does not specify which portion of the side of the plastic surface opposite the core comprises the coating, that limitation has not been included in the claim. Hence, it could be any portion of the plastic surface (so long as it is on a side of the

plastic surface opposite the core). In other words, as would be understood by one of ordinary skill in the art, the coating is not between the plastic surface and the core.

It is further noted, the OA 04/06 states: “It is unclear as to where the **side surface** of the plastic surface opposite the core is indicated.” (page 3, **emphasis** added) Applicants note, the claim is not to a “side surface” of the plastic surface, but to a *side* of the plastic surface.

Since the “side” of the plastic surface opposite the core (e.g., not between the plastic surface and the core) is clear, the requirements of 35 U.S.C. §112, second paragraph, have been met. Reconsideration and withdrawal of this rejection are respectfully requested.

#### Claim Rejections Under 35 U.S.C. §102(e)

Claims 18 - 20 stand rejected under 35 U.S.C. §102(e), as allegedly anticipated by U.S. Patent No. 5,972,461 to Sandstrom. Applicants respectfully traverse this rejection.

Claim 18 states: “injection molding a substrate comprising a plastic surface and a preformed core”.

OA states:

Sandstrom teaches...: injection molding a substrate, which could be formed from two or more layers bonded together such as laminating... wherein one of the two or more layers can be a plastic... and another of the two or more layers can be a core;...

(Page 3) However, even under this interpretation, Claim 18 is not met. To anticipate a claim, a reference must disclose *each and every element of the claim*. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). If the substrate is interpreted to be these “two or more layers” as described by the Examiner, “a substrate comprising a plastic surface and a preformed core” was not injection molded. As noted above, the Examiner suggests lamination. For at least the reason that Sandstrom fails to teach injection molding a substrate comprising a plastic surface and a preformed core, Sandstrom fails to teach all of the elements of Claim 18 and therefore fails to anticipate the present claims. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. §103(a)

Claims 21, 23, and 24 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable over U.S. Patent No. 5,972,461 to Sandstrom, in view of U.S. Patent No. 6,055,140 to Marchon. Applicants respectfully traverse this rejection.

It is alleged that Sandstrom teaches all of the limitations except a material for the plastic surface. (OA 04/06, page 4) However, as explained above, Sandstrom does not teach all of the limitations, and for at least the reasons that all of the elements are not disclosed in the prior art, the present claims are non-obvious.

In applying Section 103, the U.S. Court of Appeals for the Federal Circuit has consistently held that one must consider both the invention and the prior art “as a whole”, not from improper hindsight gained from consideration of the claimed invention. See, *Interconnect Planning Corp. v. Feil*, 227 U.S.P.Q. 543, 551 (Fed. Cir. 1985) and cases cited therein.

According to the *Interconnect* court

[n]ot only must the claimed invention as a whole be evaluated, but so also must the references as a whole, so that their teachings are applied in the context of their significance to a technician at the time - a technician without our knowledge of the solution.

*Id.*

In the present case, Sandstrom fails to teach injection molding a substrate comprising a plastic surface and a preformed core as is explained above. Also, Sandstrom, when read as a whole, teaches away from discs having sizes of up to about 1.2 mm.

A rewritable optical recording disk has a substrate with an increased thickness that is greater than or equal to approximately 1.5 mm and less than or equal to approximately 2.5 mm. The increased thickness of the substrate enhances the flatness of the recording disk relative to a recording plane.

(Abstract)

The disk fabrication process, for example, can produce warpage and tilt in the disk. With thinner substrates, in particular, the effects of gravity and thermal gradients during the post- mold cooling phase can cause uneven densification and unbalanced thermal stresses at different areas of the disks. For example, portions of the disk closest to the mold surface will cool more quickly. The result is disk warpage and tilt.

(Col. 2, line 64 – Col. 3, line 4)

In accordance with the disk of the present invention, the increased thickness of the substrate provides significantly enhanced flatness by increasing the rigidity and weight of the disk. The increased rigidity enables the disk to effectively resist deflection during disk drive operation. The increased weight and resulting gravity of the disk also counteract forces that would otherwise cause significant warpage and tilt during fabrication. Substrate thicknesses that are greater than or equal to approximately 1.5 millimeters (mm) provide the rigidity and weight necessary to achieve desired flatness across the surface area of the disk...

(Col. 4, lines 3 – 14)

In other words, a major focus of the specification of Sandstrom is the thickness of the substrate, i.e., a thickness of greater than about 1.5 mm. When substrates of a thickness of 1.2 mm are discussed, they are discussed from the perspective of laminating them together to attain a 2.4 mm thick disk:

Substrate 12 preferably is formed as a single, integrally formed piece, but could be constructed from two or more layers bonded together by, for example, adhesive bonding or lamination. For example, two polycarbonate substrates produced from conventional 1.2 mm MO substrate molds could be bonded together to provide a 2.4 mm substrate.

(Col. 7, lines 44 – 49)

Therefore, in accordance with 35 U.S.C. §103, when Sandstrom is read as a whole, it fails to teach several elements of the claims. For example, Sandstrom fails to teach the claimed thickness (Sandstrom actually teaches away from our claimed thicknesses) and the claimed substrate (e.g., injection molding a substrate comprising a plastic surface and a preformed core).

It is further alleged that

At the time the invention was made, it would have been an obvious matter of design choice... to apply the material recited in the present invention because Applicant has not disclosed that the material as recited in the claimed invention provides an advantage... According to Fig. 3 of Sandstrom..., it is well known in the art to provide the thickness of the disk in the range of 0.6 mm to 2.0 mm. Therefore it would have been an obvious matter of design choice...

(OA 04/06, pages 4 – 5)

Obviousness is not based upon what an artisan could do or what an artisan may try, but is based upon what an artisan would be motivated to do with an expectation of success. “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, No. 04-1616 (CAFC March 22, 2006) citing *In re Lee*, 277 F.3d 1338, 1343-46 (Fed. Cir. 2002); and *In re Rouffett*, 149 F.3d 1350, 1355-59 (Fed. Cir. 1998). “When the [Examiner] does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed combination as a whole, [it is] infer[ed] that the [Examiner] used hindsight to conclude that the invention was obvious.” *Id.*

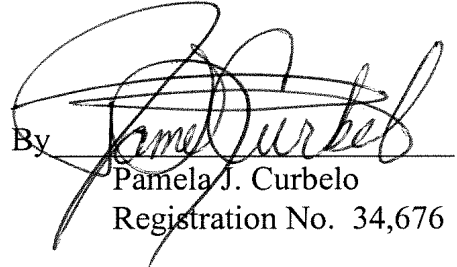
In the present case, the Examiner makes a merely conclusory statement, namely that “it would have been an obvious matter of design choice... to apply the material recited in the present invention”. There is no support based upon the prior art; the examiner supplied no motivation or expectation of success to support the alleged obviousness. Since the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, and since rejections on obviousness grounds cannot be sustained by mere conclusory statements, no *prima facie* case of obviousness has been established. Reconsideration and withdrawal of this rejection are respectfully requested.

It is believed that the foregoing remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejections and allowance of the case are respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 50-1131.

Respectfully submitted,

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